

Risks/Rewards in a Multi-State Collaborative LIMS Development Project

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Objectives:

- Share experience working in a National Public Health collaborative LIMS project
- Provide information about STARLiMS' SUNRiSE collaborative project
- Look at some of the benefits and challenges of LIMS collaboration
- Identify elements that are key to a successful collaboration

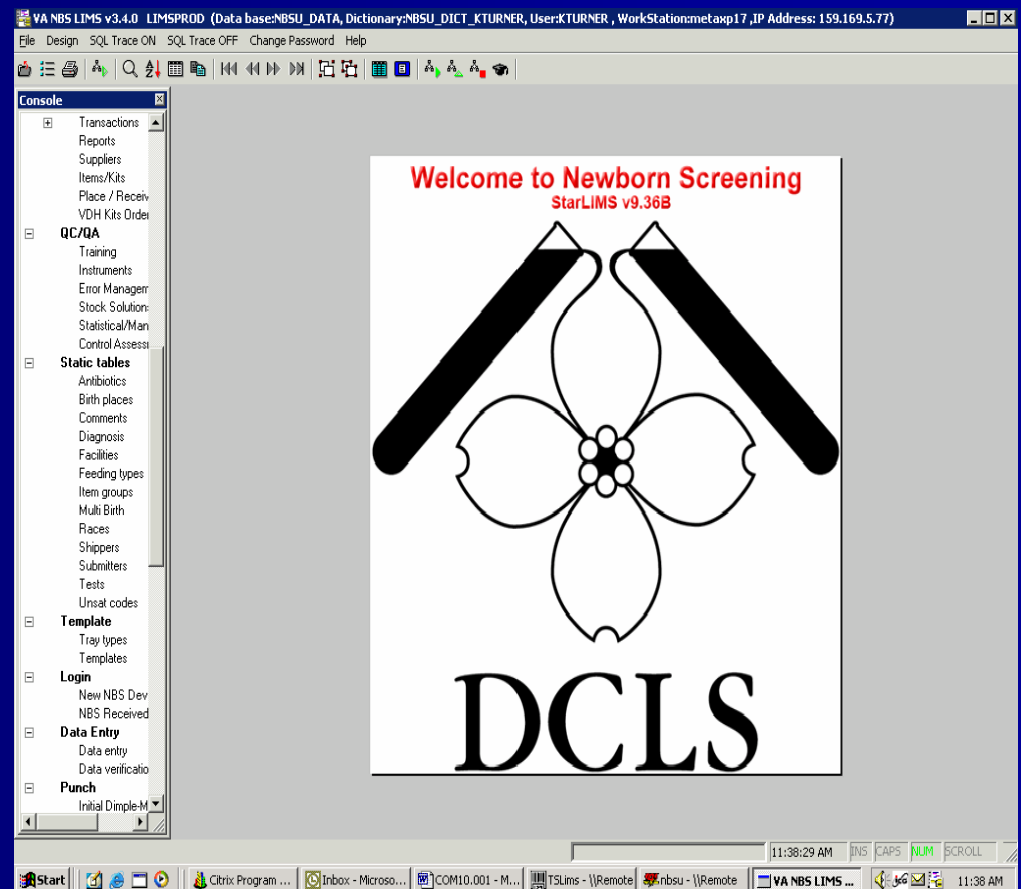
Protecting the Citizens of Virginia -



**Division of Consolidated Laboratory Services
Department of General Services
Commonwealth of Virginia**

STARLiMS comes to DCLS

- In April of 2000, **STARLiMS** was contracted to develop a customized LIMS to support the VA Newborn Screening Laboratory and all follow-up activities
- DCLS/NBS LIMS went live September 14, 2001



Post 9/11 – Public Health Laboratories focus on Emergency Preparedness and Response

- Many states received grant funding to improve EP&R capabilities
- Secure, accurate and timely transmission of data is essential to effective emergency response
- Critical need to improve the LIMS capabilities in many state and local PH laboratories
- States began to share ideas and experiences

In 2002, “the Stars aligned” and resulted in the APHL/PHII LIMS Collaborative Project

- Association of Public Health Laboratories
- Robert Wood Johnson Foundation
- Public Health Informatics Institute
- Public Health Lab Directors/staff

APHL/PHII LIMS Collaborative

- 16 States Participated
 - 6 Workgroup Members (VA, IA, KS, MN, WA).
 - 11 other states supported the project as partners or contributing members
- Sixteen business processes identified
- Requirements defined for all BP's
- Document published through APHL and available for distribution

Products of APHL/PHII Collaborative

- Requirements For Public Health Laboratory Information management Systems – A Collaboration of State Public Health Laboratories, The Association of Public Health laboratories and The Public Health Information Institute
- Logical Design for a Public Health Laboratory Information Management System – Phase I (Phase II due for release Spring 2005)
- Survey Of 200 LIMS vendors

STARLiMS Public Health LIMS Collaborative - SUNRiSE

- Originally 4 state Public Health Labs contracted with STARLiMS
 - Virginia - Arkansas
 - Iowa - Kentucky
- PHL LIMS share unique requirements
- PHL's share a great deal of commonality
- "SUNRiSE" Kick-off held in VA - February 2004
- Beta release was demo'ed in VA – July 2004

STARLiMS/SUNRiSE

Approach:

- Utilizing collaborative Webex's, conference calls and site visits the SUNRiSE participants work to establish standard models for:
 - Sample login
 - Assay workflows
 - Instrument interfacing
 - Kit preparation/distribution
 - Quality Assurance
 - Result reporting
- SUNRiSE version 1 was delivered 11/04, followed by a version 2 release 2/05

SUNRiSE Survey - 3/05

- 8 States/Co + STARLiMS surveyed
 - 16 responses (9 IT, 4 Lab, 3 Vendor)
 - 11 respondents had no collaborative experience
 - Respondents' length of involvement w/SUNRiSE
 - 1 – 3 to 5 Months
 - 5 – 6 to 12 Months
 - 10 – greater than 12 Months

SUNRiSE Survey - Benefits

- Opportunity to share knowledge, experiences, and vision
- Not re-inventing the wheel, learning from the mistakes others have made, "None of us is as good as all of us"
- Combining ideas and economizing processes
- Beneficial to have partners to better explain to the vendor how Public Health differs from other sites.
- Easier to get the vendor to make enhancements to their system for multiple sites

SUNRiSE Survey - Drawbacks

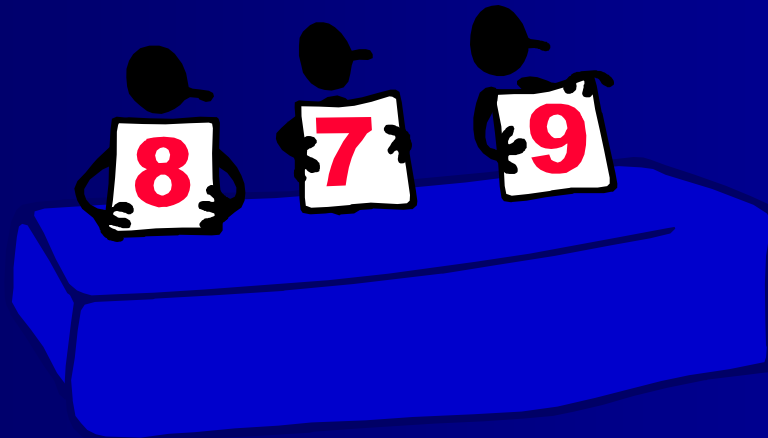
- Difficult to meet the needs of all involved without holding up the entire project
- Takes more time to configure a system for multiple states than to just concentrate on one.
- Having to share limited vendor resources
- Not being able to do more tasks together face to face; the phone and on a Webex can be a bit of a challenge.
- Participants have different levels of commitment to the collaboration

SUNRiSE Survey - Challenges

- Standardizing business practices and evolving along with the industry
- All states are on a different time line needing some assays before others.
- Logistics. We are spread all across the country and no one has a budget to see another State and go to meetings.
- Being considerate of other states and their needs if they are not applicable to your site
- Finding time to keep in touch with everyone and identify issues that need to be presented as a group.
- Maintaining a collaborative atmosphere after initial implementation

SUNRiSE Survey – Project Rating

- Overall Rating by all participants = **7.2**
 - Rating by IT participants = **6.5**
 - Rating by Lab participants = **8.0**
 - Rating by vendor participants = **8.0**



SUNRiSE Survey – General Comments

- I am 100% for the collaborative effort. I truly believe that public health is not a State issue, but a national initiative.
- Collaboration was the best path for this project because we as public health labs need to take advantage of each other's expertise.
- It has been thrilling to hear all the expertise throughout the PHL community and I feel privileged to be a part of the effort.
- Overall this has been a good way to develop software that is standardized between states and would allow for standardization on a greater scale in the future.

Update on the STARLiMS PHL "Family"

- Currently 14 state or county PHL's contracted to implement a STARLiMS application. (12 implementing SUNRiSE)
- Additional states in the process of signing contracts or bid selection
- 5 states and 1 county scheduled to move SUNRiSE into production by June '05
- CDC is a STARLiMS customer, currently implementing STARLiMS in NCID laboratories

On-going Challenges That Face the SUNRiSE Collaborative

- Project deadlines imposed on individual states shift focus away from collaboration
- States needing to implement different tests make collaboration difficult
- Finding time to participate in collaborative and site-specific efforts
- STARLiMS resources being stretched so thin
- Due to site-implementations, STARLiMS is scheduling fewer collaborative sessions

On-going Benefits of the SUNRiSE Collaborative

- Continued exchange of information among SUNRiSE users
- Collaboration between STARLiMS developers
- The ability for sites to share system enhancements
- Increased opportunities for data exchange and mutual assistance in the future
- The strength of the PHL's as a STARLiMS user group; the group's ability to influence the growth and maturity of the SUNRiSE product.

Key Elements for a Successful Collaborative LIMS Project -

- An agreed upon standard
- Well-defined scope
- Good project management
- Adequate funding & adequate time
- Adequate resources (enough people/ the right people)
- Participants that share:
 - common goals
 - high level of commitment
 - a willingness to compromise
 - the ability to look beyond today's business needs

GO WARRIORS!!!

Current stats for
the Matoaca HS JV
baseball team:
6 wins, 3 loses and
tied for 1st place in
their District.

- reported by
Joey's Mom

